

We claim:

1. A low profile socket connector having a shroud for receiving a plug connector and a connector lock for retaining the plug connector when it is plugged into the socket connector comprising:

the shroud having an exterior wall,

the exterior wall having through slots extending through the exterior wall to form a lock arm connected to the remainder of the exterior wall of the shroud by flexible straps,

the lock arm having a lock nib that is spaced from the flexible straps and that extends inwardly of the lock arm to provide a connector lock for retaining a plug connector when it is plugged into the shroud,

the lock arm having a depressible release lever, and

the lock arm having a fulcrum located between the lock nib and the depressible release lever that extends inwardly of the lock arm for engaging a fulcrum support of the socket connector whereby the lock nib is moved outwardly away from the plug connector when the depressible release lever is depressed to release the plug connector.

2. The low profile socket connector as defined in claim 1 wherein the lock arm is located in a portion of the exterior wall of the shroud.

3. The low profile socket connector as defined in claim 1 wherein the exterior wall of the shroud has a first pair of through slots and a second pair of through slots that cooperatively provide a first pair of flexible straps connecting a mid portion of the lock arm to the remainder of the shroud.

4. The low profile socket connector as defined in claim 3 wherein the second pair of through slots are L-shaped to provide a release lever that is free of the remainder of the shroud.

5. The low profile socket connector as defined in claim 4 wherein the first pair of through slots are U-shaped to provide a second pair of flexible straps that

connect a forward end of the lock arm to the remainder of the shroud to provide a continuous front end for the shroud.

6. A low profile socket connector having a connector body and a shroud connected to the connector body by an end wall to provide a socket for receiving a plug connector and a connector lock for retaining the plug connector when it is plugged into the socket connector comprising:

- the shroud having a forward exterior wall portion and a rearward exterior wall portion,

- the rearward exterior wall portion extending rearward of the end wall connecting the shroud to the connector body,

- the shroud having through slots extending through the forward and rearward exterior wall portions to form a lock arm beam connected to the remainder of the exterior wall portions of the shroud by a first pair of flexible straps,

- the lock arm having a lock nib that is forward of the first pair of flexible straps and that extends inwardly of the lock arm to provide a connector lock for retaining a plug connector when it is plugged into the shroud,

- the lock arm having a depressible release lever rearward of the first pair of flexible straps, and

- the lock arm having a fulcrum located between the lock nib and the depressible release lever for engaging a fulcrum support of the connector body whereby the lock nib is moved outwardly away from the plug connector when the depressible pump handle is depressed to release the plug connector.

7. The low profile socket connector as defined in claim 6 wherein the first pair of through slots extend through the forward exterior wall portion of the shroud and a forward portion of the rearward exterior wall portion of the shroud that extends rearward of the end wall of the socket.

8. The low profile socket connector as defined in claim 7 wherein the first pair of through slots are generally U-shaped to provide a second pair of flexible straps connecting a forward end of the lock arm to the remainder of the shroud at a front end of the shroud.

9. The low profile socket connector as defined in claim 7 wherein the second pair of through slots extend through the aft portion of the rearward exterior wall portion of the shroud.

10. The low profile socket connector as defined in claim 9 wherein the second pair of through slots is L-shaped.

11. A low profile socket connector having a shroud for receiving a plug connector and a connector lock for retaining the plug connector when it is plugged into the socket connector comprising:

the shroud having an exterior wall,

the exterior wall having through slots extending through the exterior wall to form a lock arm connected to the remainder of the exterior wall of the shroud by forward and rearward pairs of flexible straps,

the lock arm having a lock nib that is located between the forward and rearward pairs of flexible straps and that extends inwardly of the lock arm to provide a connector lock for retaining a plug connector when it is plugged into the shroud,

the lock arm having a depressible release lever, and

the lock arm having a fulcrum located between the lock nib and the depressible release lever that extends inwardly of the lock arm for engaging a fulcrum support of the socket connector whereby the lock nib is moved outwardly away from the plug connector when the depressible release lever is depressed to release the plug connector.

12. The low profile socket connector as defined in claim 11 wherein the lock arm is located in a portion of the exterior wall of the shroud.

13. The low profile socket connector as defined in claim 11 wherein the second pair of flexible straps are L-shaped so that the depressible release lever is free of the remainder of the shroud.

14. The low profile socket connector as defined in claim 12 wherein the second pair of flexible straps are L-shaped so that the depressible release lever is free of the remainder of the shroud.